

REMARKS/ARGUMENTS

Non-elected claims are cancelled without prejudice to filing a divisional application. To avoid the formal objections, Claim 24 has been amended to depend from Claim 23 and Claim 25 has been amended to depend from Claim 24.

Additionally, independent method Claims 35 and 38 have been amended to incorporate the features of the composition claims 33 and 36 respectively.

In support of the following arguments, a declaration signed by the inventor, Christopher Raymond Jones, is enclosed. The declaration confirms some statements of fact relied on below, to distinguish the present claims from the art.

Claims 20-23, 26, 27 and 32 are rejected as anticipated by Fidoe (WO 02/08127). The remaining rejections of claims is that they lack novelty or inventive step in view of Fidoe or in view of Fidoe in combination with Case (US 2 877 848). Independent claim 38 is viewed as obvious from Fidoe in view of Lansford (US 3 832 302). The Examiner has also raised an objection of double patenting over granted US Patent No: 6 926 836.

The Examiner states that Fidoe discloses a method of treating water containing metal sulphide scale comprising adding THP salt and a dispersant. However, the present invention is not a method for treating water but rather a method for treating an inorganic slurry to maintain the slurry in a substantially homogeneous phase and to preserve the slurry against bacterial contamination. Thus the methods are not the same and as detailed below, they do not have the same effect or are obvious over each other.

The treatment of water containing metal sulphide scale (Fidoe) is not the same as the treatment of an inorganic slurry (present claims). The enclosed declaration clarifies the difference between a slurry, as required by the present invention, and water containing metal sulphide scale. Namely, the metal sulphide scale in water disclosed in Fidoe is not a slurry because it is a heterogeneous matrix with a low solids content rather than a homogeneous phase of a liquid containing an appreciable quantity of suspended solid.

The declaration also sets out that the teaching of Fidoe is different from (and opposite in essential operation from) the

present invention because Fidoe is concerned with dissolving the metal sulphide scale to avoid any solids whereas the present invention is a method for maintaining the slurry in a substantially homogeneous phase. The metal sulphide scale deposit in water, as disclosed in Fidoe, would not be homogeneous and therefore would not need to be maintained as a homogeneous phase. Indeed, the scale would be removed by following the teaching of Fidoe. Because the methods accomplish opposite purposes in different ways, the present invention is not shown or inherent in Fidoe.

Regarding the obviousness objections, the present invention relates to a method which comprises the addition of compositions comprising particular THP[†] salts in combination with particular dispersants for treating an inorganic slurry to maintain the slurry in a substantially homogeneous phase and to preserve the slurry against bacterial contamination. One would find no teaching in Fidoe relevant to a method for treating an inorganic slurry (to maintain a homogenous phase) because, as detailed above, Fidoe is concerned with the treatment of metal sulphide scale in water. There is no indication in Fidoe that the compositions disclosed

therein could, let alone should, be used in a method for treating an inorganic slurry. Therefore, one would would not be motivated to treat an inorganic slurry with the compositions disclosed in Fidoe.

Furthermore, there is no teaching or suggestion in Fidoe that the compositions disclosed therein could successfully be used in a method to both maintain a slurry in a substantially homogeneous phase and preserve the slurry against bacterial contamination. Indeed, the problem of lack of homogeneity is not even considered in Fidoe. Homogeneity is not a concern for metal sulphide scale deposits in water given that the metal sulphide scale is undesirable and is being removed by the treatment of Fidoe. The present invention is of course concerned with maintaining a homogeneous slurry whereas Fidoe is directed solely toward the dissolving and removal of metal sulphide scale which involves a process of converting a heterogeneous mixture to a solution. Accordingly, Fidoe does not teach toward maintaining a homogeneous slurry but instead teaches toward the conversion of a heterogeneous mixture to a solution. Therefore one is directed

away from the present invention upon consideration of the teaching of Fidoe.

The present invention is distinguished from Fidoe by the use of particular biocides (THP sulphate, chloride, phosphate, nitrate or oxalate) and dispersants (phosphonated compounds containing at least one tertiary nitrogen atom or homopolymers of unsaturated acids) to treat an inorganic slurry to both maintain the slurry in a substantially homogeneous phase and to preserve the slurry against bacterial contamination. There is nothing in Fidoe that provides any sort of indication or suggestion of this particular process. Rather, as explained in pages 1 and 2 of Fidoe, the process is for dissolving ferris sulphide or other sulphide deposits (see page 4 of Fidoe, second and third paragraph). This is a teaching away from the maintaining of a slurry. In context the teaching of Fidoe would not be consulted for solving the present invention object. Thus, it would not be obvious that the products required by the present invention could successfully be used together in a composition to achieve the method as set out in the method of claim 20.

Furthermore, one would have been unlikely to have considered Lansford given that it does not relate to the field of treating inorganic slurries. Additionally, even if he had considered Lansford, it provides no indication or teaching that the agents described therein could, let alone should, successfully be used in a method to achieve both of the effects set out in claim 20. Accordingly, given that Lansford makes no mention of treating inorganic slurries and does not even identify the problems of lack of homogeneity and preservation of a slurry against bacterial contamination, one would not arrive at the present invention by combining the disclosures of Fidoe and Lansford.

Further, whilst Case discloses the treatment of calcium carbonate it does not disclose how to maintain a slurry in a substantially homogeneous phase and preserving the slurry against bacterial contamination. There is no indication or suggestion that this could be achieved, let alone how it might be achieved. Indeed, Case is concerned with dissolving precipitates in wells (see column 1, line 72 - column 2, line 7) rather than maintaining a substantially homogeneous phase for a slurry. Accordingly, one would not be motivated to combine the

disclosures of Fidoe and Case and, even if he did combine them, he would not arrive at the present invention.

To conclude, none of the prior art recognizes that it would be possible to maintain an inorganic slurry in a homogeneous phase whilst preserving the slurry against bacterial contamination, let alone disclosing or suggesting that this could be achieved through the use of THP plus dispersant. Therefore even when all of the cited art is combined, features of the invention are still missing and unobvious.

Narrower independent claims 35 and 38 are novel and inventive for the same reasons as those given above in relation to independent claim 20. Dependent claims 21-32 are novel and inventive at least by virtue of their direct or indirect dependency on claim 20.

The Examiner also rejected independent claims 20 and 35 as well as a number of the dependent claims on the ground of obviousness-type double patenting over the granted claims of US 6926836 in view of Fidoe. Although the present claims are not an obvious variation of what has already been patented in US 6926836, (in particular US 6926836 treats a water system

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containing metal sulphide scale, which, as discussed above is entirely different from treating a slurry) to expedite prosecution the applicant is filing a Terminal Disclaimer in response to this objection. Withdrawal of the double-patenting rejection is therefore requested.

In view of the above, the rejections are avoided. Allowance of the application is therefore respectfully requested.

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Respectfully submitted,

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**Enc. Declaration
Terminal Disclaimer
Form PTO-2038 - \$140**